

# Directional Controls



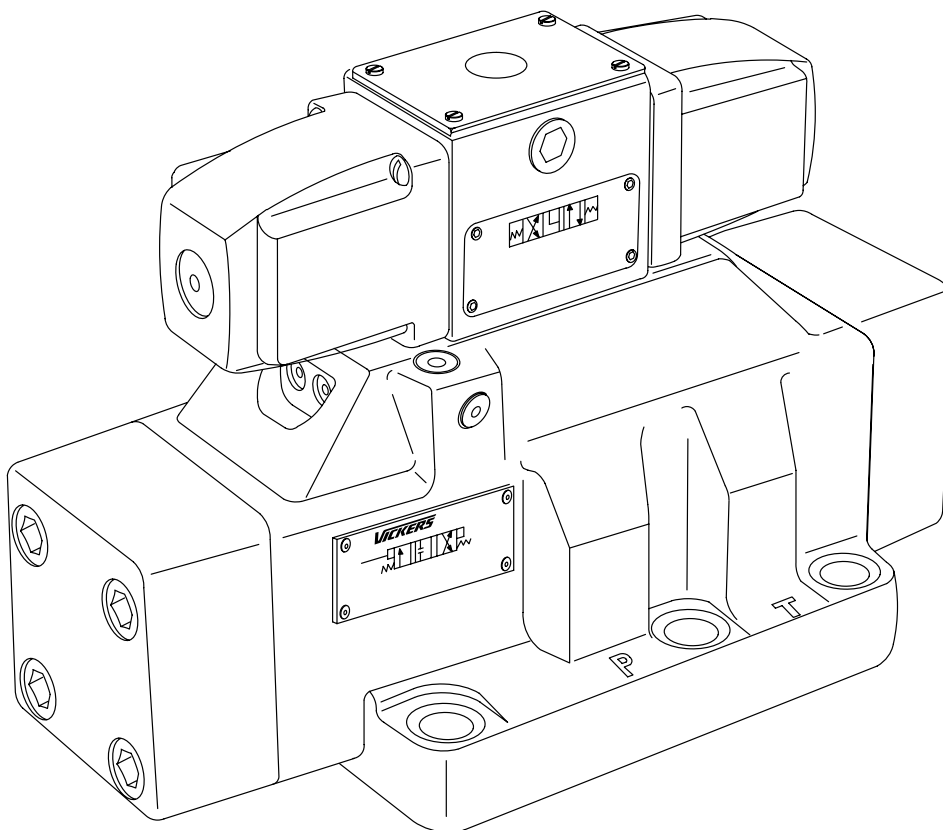
## Wet Armature, Pilot Operated Solenoid Controlled, Directional Valve

DG5S4-10\*A\*W(3)-\*-53

DG5S4-10\*B\*W(3)-\*-53

DG5S4-10\*C\*W(3)-\*-53

DG5S4-10\*N\*W(3)-\*-53



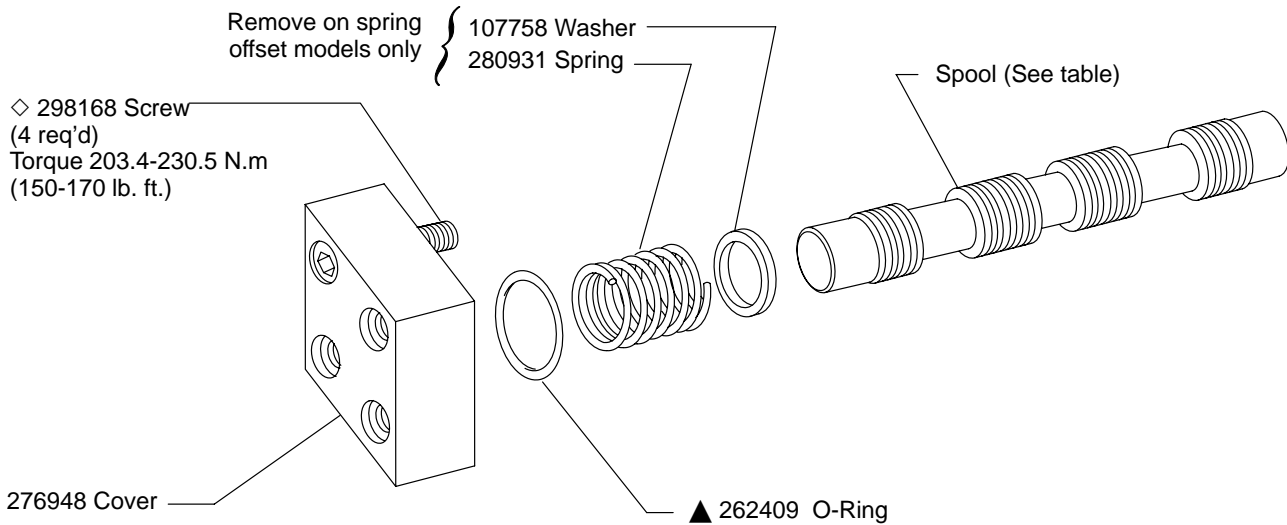
Plug Installation Table			
Model	Plug "A"	Plug "B"	Plug "C"
DG5S4-10**-	Does Not Exist	30560	Out
DG5S4-10**-E		7074	30560
DG5S4-10**-X		Out	Out
DG5S4-10**-X-E			
DG5S4-10**-K/L/R/S	161809		
DG5S4-10**-E-K/L/R/S	113000	7074	30560
DG5S4-10**-X-K/L/R/S	Out		Out
DG5S4-10**-X-E-K/L/R/S	113000		

■ Plug Torques (Oiled)		
Plug	N.m	lb. in.
7074	8.5-9.6	75-85
7075	20.0-23.0	180-205
30560	8.5-9.6	75-85
113000	5.0-5.9	45-52
161809	5.0-5.9	45-52
343740	10.0-11.8	90-105
363889	16.9-18.0	150-160
407533	3.4-4.0	30-35

Valve Model Code		Spool	Main Stage ID Plate W/Circuit Diagram	
Model	Valve Type		A	B, C, N
DG5S4-100-	A/B/C/N	364037	400975	400976
DG5S4-101-	B/C	*331404	—	400977
DG5S4-102-	A/B/C/N	364038	400975	400978
DG5S4-103-	B/C	*277479	—	400979
DG5S4-104-		281193	—	400980
DG5S4-106-	A/B/C/N	364039	400975	400981
DG5S4-108-	B/C	364041	—	400980
DG5S4-109-	A/B/C/N	277563	400975	400976
DG5S4-1031-	B/C	*277479	—	580475
DG5S4-1033-	A/B/C/N	364042	400975	400981

\*Assemble type "1" and "3" spools with narrow center land toward "A" end of valve. "A" end is defined as being closest to cylinder port "A". The type "31" spool is installed in reverse of type "3", with narrow center land toward "B" end.

Pilot Attaching Parts		
Model	Bolt (4 req'd)	L'Washer (4 req'd)
W/Out Pilot Choke	□ 1034	∅□ 68907
W/Pilot Choke (See back page)	∅ 10938	
Torque to 11.3 - 12.65 N.m (100-112 lb. in.)		



**Note**  
Refer to Parts Drawing I-3487-S for models with Plug-in Features.

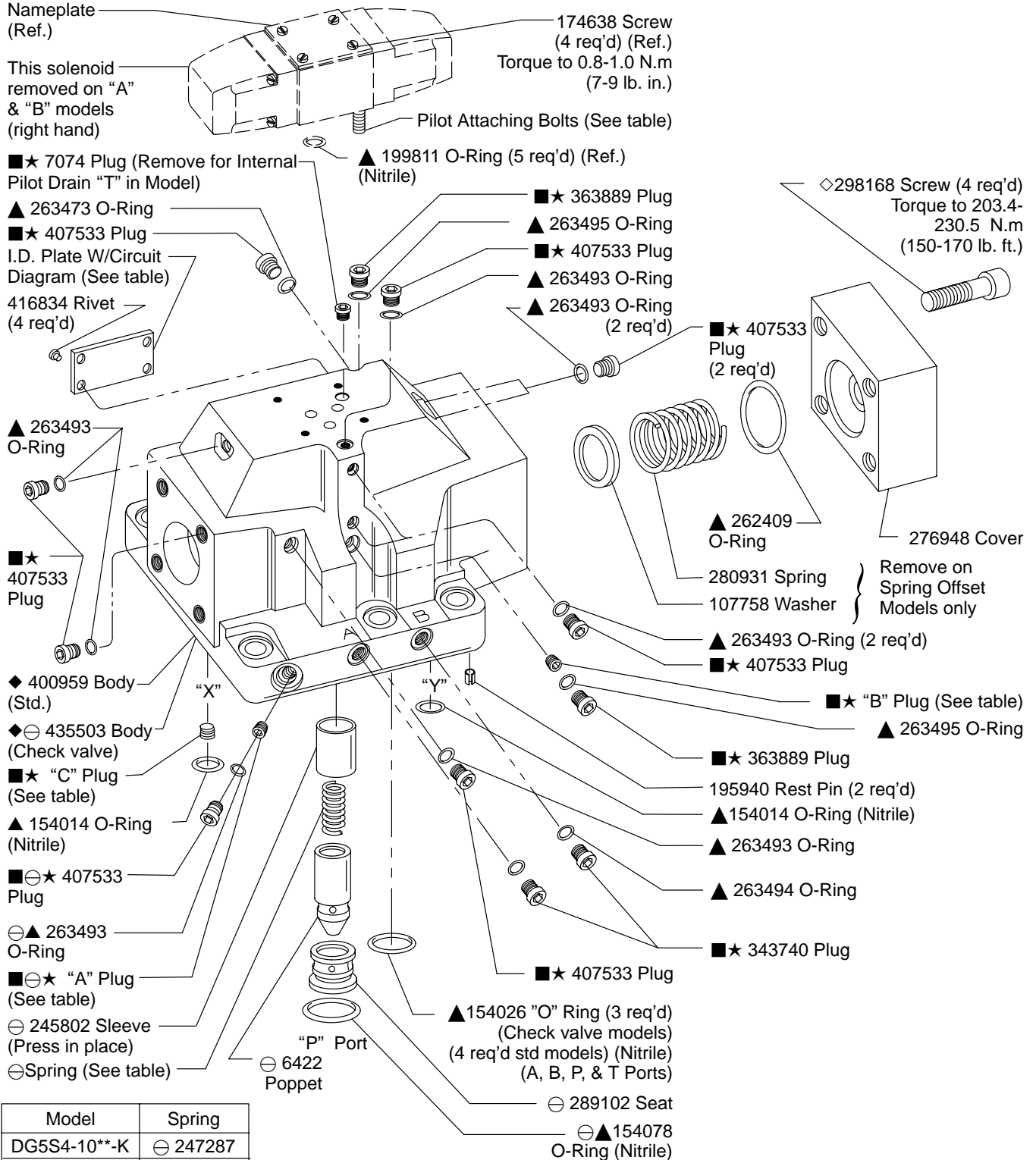
- ▲▲ Included in F3 Seal Kit 920213
- ◇ Included in Fastener Kit 941262
- Included in Bolt Kit 255633
- ∅ Included in Bolt Kit 255654
- ★ Included in Plug Kit 941263
- Plug Torques (See table)
- ◆ Not available for sale
- ⊖ Used in Check Valve models only

**Note**  
SAE straight thread plugs used on exterior of valve.

**Note**  
Parts included in service kits will not be sold separately.

**Seal Kit Note**  
The -53 design valves are manufactured as shown with F3 seals used internally. Interface seals are standard Nitrile material and are converted to F3 in the seal kit. All seals in the Seal Kit are F3.

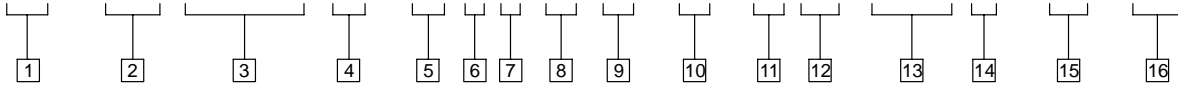
Valve Model	Main Stage Spool	Pilot Valve Model	Pilot Valve Exploded View Shown on:
DG5S4-10*A-W-*53	0, 2, 6, 9, 33	DG4S4-012A-W-*50	I-3557-S
DG5S4-10*B-W-*53	0, 1, 2, 3, 6	DG4S4-016B-W-*50	I-3558-S
	9, 31, 33	DG4S4-0168B-W-*50	
	4 & 8	DG4S4-0168B-W-*50	
DG5S4-10*C-W-*53	0, 1, 2, 3, 6	DG4S4-016C-W-*50	I-3558-S
	9, 31, 33	DG4S4-0168C-W-*50	
	4 & 8	DG4S4-0168C-W-*50	
DG5S4-10*N-W-*53	0, 2, 6, 9, 33	DG4S4-012N-W-*51	I-3559-S



Model	Spring
DG5S4-10**-K	⊖ 247287
DG5S4-10**-L	⊖ 247288
DG5S4-10**-R	⊖ 276428
DG5S4-10**-S	⊖ 432353

# Model Code

**(F3) - (P\*\*) DG5S4 (L) - 10 \* \* (X) (\*) - (E) - (T)(\*) - W(3) \* - 53 - (LH)**



**1 Seal Material**

**F3** - Seals for mineral oil and fire resistant fluids (Viton seals)

**2 Electrical Feature Plug**

(See note below)

**3 Model Series**

**DG3S4** - Directional valve, subplate or manifold mounted, solenoid controlled, pilot operated, sliding spool, flow directions 4 - 4 way

**4 Solenoid Indicator Lights**

**L** - Light  
**Omitted** - None

**5 Series**

**10** - 100 (1.250 inch)

**6 Spool Type**

**7 Valve Type**

**A** - Spring offset  
**B** - Spring centered (one solenoid)  
**C** - Spring centered  
**N** - No spring detented

**8 Response**

**"X"** - Fast response model  
**Omitted** - Low shock model

**9 Spool Control Modifications**  
(Omit if not required)

**1** - Stroke adjustments  
**2** - Pilot choke adjustments  
**3** - Pilot choke & stroke adjs.  
**7** - Stroke adj. "A" end only  
**8** - Stroke adj. "B" end only

**10 External Pilot Pressure**

**Omitted** - Internal pilot pressure

**11 Pilot Drain**

**T** - Internal  
**Omitted** - External

**12 Check Valve**

**K** - 5 PSI (0.35 bar) cracking press.  
**L** - 35 PSI (2.14 bar) cracking press.  
**R** - 50 PSI (3.45 bar) cracking press.  
**S** - 75 PSI (5.2 bar) cracking press.  
**Omitted** - No check valve

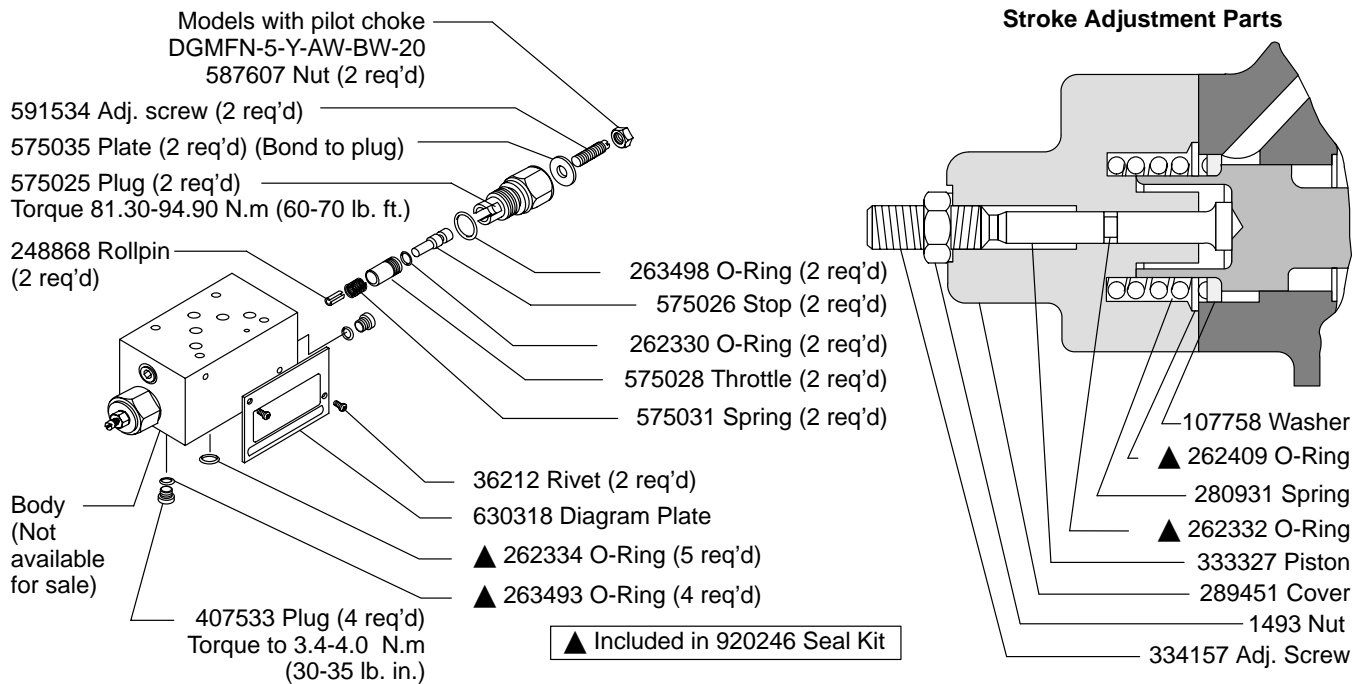
**13 Wet Armature Type**

**W** - Non-serviceable core tube in pilot  
**W3** - Serviceable core tube in pilot check valve

**14 Coil Identification Letter**

**15 Design**

**16 Left Hand Assembly**



**Electrical Plug Feature (Omit if not required)**

**PA** - Insta-Plug, Male Receptacle only  
**PB** - Insta-Plug, Male & Female Receptacle

**PA3** (3 Pin) & **PA5** (5 PIN) receptacles that meet NFPA Hydraulic Valve Electrical Standard T3.5.29M-1980.

For satisfactory service life of these components use full flow filtration to provide fluid which meets ISO cleanliness code 20/18/15 or cleaner. Selections from Eaton OFF, OFR, and OFRS series are recommended.